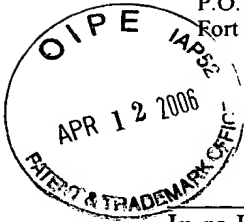


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HEWLETT-PACKARD COMPANY  
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Docket No.: 10004955-1  
(PATENT)



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Michael J. Chaloner et al.

Confirmation No.: 6430

Application No.: 09/912,211

Group Art Unit: 2635

Filed: July 24, 2001

Examiner: V. U. Brown

For: SYSTEM AND METHOD FOR IMPROVED  
OBJECT IDENTIFICATION

**APPELLANT'S REPLY BRIEF (37 C.F.R. 41.41)**

**Attention: Board of Patent Appeals and Interferences**  
Commissioner for Patents  
PO Box 1450  
Washington, DC 20231

Dear Sir:

This reply brief, filed pursuant to 37. C.F.R. § 41.41, is in response to the Examiner's Response, mailed in this case on February 23, 2006. Should the Primary Examiner not find the comments contained herein persuasive, acknowledgement of receipt and entry of this Reply Brief is requested.

The fees required under § 1.17(c) and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying TRANSMITTAL OF APPEAL REPLY BRIEF.

This brief contains these items under the following headings:

I. Reply to Examiner's Response

II. Conclusion

The final page of this brief bears the attorney's signature.

**I. REPLY TO EXAMINER'S RESPONSE**

Appellant thanks the Board for their time and consideration. For the convenience of the Board, Appellant does not repeat arguments herein, but rather, comments on the Examiner's Response to Argument beginning at page 11 of the Examiner's Answer. In no way should the Appellant's organization of arguments below be construed as an indication that any claims should be considered together or separately in a way other than as indicated in the Appellant's Brief.

**A. First Ground of Rejection**

Claims 23-29 and 32 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Bowers* in view of *Francis* in further view of *Maloney*. Appellant further traverses the rejection.

**1. Lack of Motivation to Combine References**

Many of the grounds of rejection fail to provide motivation to combine the references. Appellant notes that the first ground of rejection does not provide a reason why one of ordinary skill in the art would be motivated to combine features from *Maloney* with *Bowers* and *Francis*. See Appellant's Brief at 6-7. Specifically, Appellant asserts that pointing to alleged features of *Maloney* is not enough to explain why one of ordinary skill in the art would be motivated to make the combination. *Id.* at 7. In response, the Examiner states:

The reference of Maloney teaches an alternative container (figure 7) to the container as described by Bowers in which each of the articles in the container is individually monitored and therefore requires a plurality of receivers

Examiner's Answer at 11. Such statement is insufficient because it is still only an allegation about features taught by *Maloney*, and it does not attempt to explain why one of ordinary skill in the art would be motivated to combine the alleged plurality of receivers from *Maloney* with the cited portions of the other references. Accordingly, Appellant respectfully requests the reversal of the first ground of rejection.

## 2. Failure to Teach or Suggest All Limitations

On page 11 of the Examiner's Answer, the Examiner argues that the cited combination teaches a linear array and that it also teaches object presence detection equipment internal to the container. Appellant understands the Examiner's position but notes that whether or not the Examiner is correct, the rejection still contains deficiencies. Specifically, there is a lack of motivation to make the cited combination, and other limitations are not taught or suggested.

In Appellant's Brief, Appellant notes that the cited combination of references fails to teach or suggest, "an object of said set of objects is operable to modify said transmitted signal energy of a selected frequency to generate said received signal energy of said selected frequency," as recited by independent claim 23. In response, the Examiner states that the frequency shifting of the returned signal in *Bowers* reads on the above-quoted limitation. Examiner's Answer at 12. However, this reinforces Appellant's argument. Appellant respectfully asserts that since *Bowers* teaches that its RFID tags change their resonant frequency before returning a signal so that the RFID tags return a signal with a frequency different from that received. Appellant's Brief at 8. Accordingly, it was noted, a different frequency does not teach or suggest "said frequency." *See id.* Therefore, the combination of *Bowers*, *Francis*, and *Maloney* does not teach or suggest the above-quoted feature of claim 23. For the reasons above, Appellant respectfully requests that the first ground of rejection be reversed.

## B. Second Ground of Rejection

### 1. Lack of Motivation to Combine References

As shown above with regard to claims 23-29 and 32, the Office Action does not provide proper motivation to combine *Maloney* with *Bowers* and *Francis*. The rejection of claim 30, which adds *Lastinger* to the combination, does not cure the deficiency because it also does not explain why one of ordinary skill in the art would be motivated to combine *Maloney* with the other references. Accordingly, the second ground of rejection.

2. Failure to Teach or Suggest All Limitations

The Examiner's Answer does not respond specifically to claim limitations in the second ground of rejection; thus Appellant does not present more arguments here, as the second ground of rejection is adequately addressed in Appellant's Brief.

**C. Third Ground of Rejection**

Claim 31 is rejected under 35 U.S.C. §103(a) as being unpatentable over *Bowers* in view of *Francis* in view of *Maloney* in further view of *Greene*. Appellant further traverses the rejection.

1. Lack of Motivation to Combine References

As shown above with regard to claims 23-29 and 32, the Office Action does not provide proper motivation to combine *Maloney* with *Bowers* and *Francis*. The rejection of claim 31, which adds *Greene* to the combination, does not cure the deficiency because it also does not explain why one of ordinary skill in the art would be motivated to combine *Maloney* with the other references. Accordingly, the third ground of rejection must fail.

2. Failure to Teach or Suggest All Limitations

In Appellant's Brief, Appellant notes that the cited combination does not teach or suggest, "wherein objects in a subset of said objects within said set of objects are interchangeable and resonate at the same frequency," as recited by claim 31. Appellant's Brief at 10. Specifically, Appellant notes that the relied-upon reference, *Greene*, does not teach or suggest that objects are interchangeable. *Id.* In response, the Examiner asserts:

Green teaches tags having the same resonant frequency (col. 6 lines 27-29). The tags are therefore interchangeable because they resonate at the same frequency.

Examiner's Answer at 12. *Greene* teaches using a plurality of resonators in a single target to identify that target. *See* Col. 5, lines 20-33. The cited passage teaches that 9-bit data words may be made from nine different resonators. However, it does not teach or suggest that the data words or the resonators themselves are interchangeable. Therefore, the combination of

*Bowers, Francis, Maloney, and Greene* does not teach or suggest the above-quoted feature of claim 31.

Alternatively, it should be noted that *Greene* teaches that when multiple resonators have the same resonant frequency, they do not provide identifying information. *Greene* at Col. 5, lines 27-33. If the Examiner's statement that *Greene* teaches tags with the same resonant frequency is true, then *Greene* cannot be combined with *Bowers*. *Bowers* teaches that articles each have a unique identification. *See, e.g., Bowers* at Abstract. Such combination would render the *Bowers* system unfit for its intended purpose, since the articles could not be uniquely identified. A modification, such as this, which would render the prior art system unsatisfactory for its intended purpose is improper. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). For the reasons above, Appellant respectfully requests that the third ground of rejection be reversed.

#### **D. Fourth Ground of Rejection**

Claims 33-38, 42, 44-47, 50, and 51 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Bowers* in view of *Francis*. Appellant further traverses the rejection.

In Appellant's Brief, Appellant respectfully asserts that the cited combination does not teach or suggest identifying a subset of objects within a container by "transmitting a selected frequency signal within said container . . . wherein said subset comprises a plurality of said objects responsive to said selective frequency" because *Bowers* does not teach identifying subsets, nor does it teach a subset comprises a plurality of objects responsive to a selected frequency. Appellant's Brief at 10-11. In response, the Examiner asserts:

*Bowers et al.* teaches that each of the objects has a radio frequency tag attach to it (col. 2 lines 25-28). The object to which the RF tag is attached includes books, video tapes, CD's, and audio tapes (col. 6 lines 26-49) and each tag respond to a particular frequency (col. col. 8 lines 36-43). Each of these types of objects (e.g. tape is a subset) forms a subset of the entire group of objects.

Examiner's Answer at 12. However, this statement is incorrect. Since each tag in *Bowers* responds to a particular frequency, *Bowers* does not teach or suggest, "wherein said subset comprises a plurality of said objects responsive to said selective frequency." Therefore,

the combination of *Bowers* and *Francis* does not teach or suggest the above-quoted feature of claim 33.

Furthermore, Appellant notes that the cited combination does not teach or suggest “shielding the interior of said container from extraneous external signals” as recited by claim 33, because *Francis* (the particular reference relied upon for this feature) merely teaches that RF shields are positioned between RFID tags. Appellant’s Brief at 11. For this reason, Appellant also asserts that the combination does not teach or suggest a “metallic outer body operable to shield said equipment and said tape cartridges from extraneous external signals,” as recited by independent claim 42. In response, the Examiner states:

Francis teaches the use of RF shield so that only the RF tag position on the same side of the plane of the shield along with the interrogator will receive the interrogation signal (col. 5 lines 17-22, col. 9 lines 49-65). The placement of the RF shield as disclosed by *Francis* et al. and as claimed by the Appellant is therefore not pattenable distinct because the RF shield in both cases are used to create a RF boundary for preventing extraneous or external electromagnetic signal from crossing the RF boundary.

Examiner’s Answer at 12-13. Appellant disagrees with the reasoning. The Examiner’s statement asserts that the general concept of RF shielding reads on the claimed features, and the Examiner does not give patentable weight to Appellant’s claimed techniques. In other words, the Examiner cites RF shielding in general, but does not demonstrate that the cited art teaches or suggests, “shielding the interior of said container,” as recited by claim 33, or a “metallic outer body operable to shield said equipment and said tape cartridges,” as recited by claim 42. Not only does the cited art fail to teach or suggest the recited features, but the rejection of record fails to address the claimed techniques.

Further, Appellant’s Brief notes that the cited combination fails to teach or suggest, “a tape cartridge ... is operable to modify said transmitted signal energy of a selected frequency to generate said received signal energy of said selected frequency,” as recited by claim 42. In response, the Examiner states that the frequency shifting of the returned signal in *Bowers* reads on the above-quoted limitation. Examiner’s Answer at 12. However, this reinforces Appellant’s argument. Appellant notes that since *Bowers* teaches that its RFID tags change their resonant frequency before returning a signal so that the RFID tags return a signal with a frequency different from that received. Appellant’s Brief at 12. Accordingly, it was noted, a

different frequency does not teach or suggest “said frequency.” *See id.* Therefore, the combination of *Bowers* and *Francis* does not teach or suggest the above-quoted feature of claim 42.

Appellant’s Brief notes that “said analysis determines the number of members of said subset present within said container,” as recited by claim 51 is not taught or suggested by the cited combination. Appellant’s brief at 13. Specifically, Appellant notes that *Bowers* does not teach or suggest the quoted feature because its cited shelf report is not taught to provide a “number of members...present within said container.” *Id.* In response, the Examiner states, “the analysis of the listing of container's content report 116 as shown in figure 7 provides the information of the number of items present in a subset.” Examiner’s Answer at 13. However, the cited shelf report of figure 7 of *Bowers* does not provide a “number of members...present within said container,” contrary to the Examiner’s assertion. The content provided in the shelving report is not enough by itself to teach or suggest the above-quoted feature.

In the Examiner’s Answer at 11, the Examiner argues that *Bowers* teaches “a tape storage container comprising . . . object presence detection equipment internal to said container,” as recited by independent claim 42. Appellant understands the Examiner’s position but notes that whether or not the Examiner is correct, the rejection still contains deficiencies. Specifically, other limitations are not taught or suggested.

Dependent claims 34-38 each depend either directly or indirectly from independent claim 33 and, thus, inherit all of the limitations of independent claim 33. Further, dependent claims 44-47 and 50 each depend either directly or indirectly from independent claim 42 and, thus, inherit all of the limitations of independent claim 42. Thus, the cited combination does not teach or suggest all claim limitations of claims 34-38, 44-47, and 50. It is respectfully submitted that the dependent claims are allowable at least because of their respective dependence from claims 33 and 42 for the reasons discussed above. Therefore, Appellant respectfully requests that the fourth ground of rejection be reversed.



**E. Fifth Ground of Rejection**

The Examiner's Answer does not respond specifically to the fifth ground of rejection; thus Appellant does not present more arguments here, as it is adequately addressed in Appellant's Brief.

**F. Sixth Ground of Rejection**

Claim 49 is rejected under 35 U.S.C. §103(a) as being unpatentable over *Bowers* in view of *Francis* in further view of *Greene*. Appellant further traverses the rejection.

In Appellant's Brief, Appellant notes that the cited combination does not teach or suggest, "tape cartridges in a subset of said tape cartridges within said plurality of tape cartridges are interchangeable with one another and resonate at the same frequency," as recited by claim 49. Appellant's Brief at 14. Specifically, Appellant notes that the relied upon reference, *Greene*, does not teach or suggest that objects are interchangeable. *Id.* In response, the Examiner asserts:

Greene teaches tags having the same resonant frequency (col. 6 lines 27-29). The tags are therefore interchangeable because they resonate at the same frequency.

Examiner's Answer at 12. *Greene* teaches using a plurality of resonators in a single target to identify that target. *See* Col. 5, lines 20-33. The cited passage teaches that 9-bit data words may be made from nine different resonators. However, it does not teach that the data words or the resonators themselves are interchangeable. Therefore, the combination of *Bowers*, *Francis*, *Maloney*, and *Greene* does not teach or suggest the above-quoted feature of claim 49.

Alternatively, it should be noted that *Greene* teaches that when multiple resonators have the same resonant frequency, they do not provide identifying information. *Greene* at Col. 5, lines 27-33. If the Examiner's statement that *Greene* teaches tags with the same resonant frequency is true, then *Greene* cannot be combined with *Bowers*. *Bowers* teaches that articles each have a unique identification. *See, e.g., Bowers* at Abstract. Such combination would render the *Bowers* system unfit for its intended purpose, since the articles could not be uniquely identified. A modification, such as this, which would render the prior art system unsatisfactory for its intended purpose is improper. *In re Gordon*, 733 F.2d 900, 221 USPQ

1125 (Fed. Cir. 1984). For the reasons above, Appellant respectfully requests that the sixth ground of rejection be reversed.

**G. Seventh Ground of Rejection**

Appellant does not presents no further arguments here, as it is adequately addressed in Appellant's Brief.

**II. Conclusion**

Once again, Appellant thanks the Board for their time and consideration. At least for the reasons discussed above, reversal of the seven grounds of rejection is respectfully requested.

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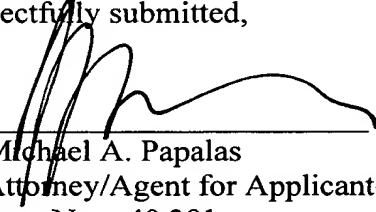
Date of Deposit: April 12, 2006

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Respectfully submitted,

By

  
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PATENT APPLICATION

ATTORNEY DOCKET NO. 10004955-1

IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Michael J. Chaloner et al.

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Title: SYSTEM AND METHOD FOR IMPROVED OBJECT IDENTIFICATION

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PO Box 1450  
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TRANSMITTAL OF REPLY BRIEF

Transmitted herewith is the Reply Brief with respect to the Examiner's Answer mailed on 02/23/2006.

This Reply Brief is being filed pursuant to 37 CFR 1.193(b) within two months of the date of the Examiner's Answer.

(Note: Extensions of time are not allowed under 37 CFR 1.136(a))

(Note: Failure to file a Reply Brief will result in dismissal of the Appeal as to the claims made subject to an expressly stated new ground rejection.)

No fee is required for filing of this Reply Brief.

If any fees are required please charge Deposit Account 08-2025.

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Date of Deposit: April 12, 2006

Typed Name: Donna Forbit

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